

Statement of Basis of the Federal Operating Permit

DSM Nutritional Products, LLC

Site Name: Beta Carotene Production Unit
Physical Location: 1000 County Road 227
Nearest City: Freeport
County: Brazoria

Permit Number: O3943
Project Type: Initial Issuance

The North American Industry Classification System (NAICS) Code: 325412
NAICS Name: Pharmaceutical Preparation Manufacturing

This Statement of Basis sets forth the legal and factual basis for the draft permit conditions in accordance with 30 TAC §122.201(a)(4). An application for initial permit issuance has been submitted in accordance with 30 TAC § 122.201. This document may include the following information:

- A description of the facility/area process description;
- A basis for applying permit shields;
- A list of the federal regulatory applicability determinations;
- A table listing the determination of applicable requirements;
- A list of the New Source Review Requirements;
- The rationale for periodic monitoring methods selected;
- The rationale for compliance assurance methods selected;
- A compliance status; and
- A list of available unit attribute forms.

Prepared on: February 16, 2018

Operating Permit Basis of Determination

Permit Area Process Description

DSM provides nutritional solutions for the food and beverage, dietary supplements, and early-life and clinical nutritional markets, with a parallel focus on solutions for the pharmaceutical industry for the use of vitamins, nutritional lipids and carotenoids as active pharmaceutical ingredients.

The DSM site receives raw materials and uses them to produce Beta-carotene through a series of reactions and distillations or evaporations. The site is subject to Title V permitting as a result of the use of Methylene Chloride as a processing aid in the final Beta-Carotene manufacturing process unit. Since the intermediate and final products are solids, reactor effluents are mixed with solvents for extraction or washing; distilled to recover or recycle solvent s; and fed through filters, evaporator trains, or centrifuges to decant and dry the solid products.

All process vent emissions are controlled by scrubbers, filters or flares. Piping fugitives are monitored under the TCEQ's 28RCT program. An onsite wastewater treatment plant (WWTP) treats wastewaters generated from separation processes. Waste solvents are sent offsite either for recovery, reuse or for disposal.

FOPs at Site

The "application area" consists of the emission units and that portion of the site included in the application and this permit. Multiple FOPs may be issued to a site in accordance with 30 TAC § 122.201(e). When there is only one area for the site, then the application information and permit will include all units at the site. Additional FOPs that exist at the site, if any, are listed below.

Additional FOPs: None

Major Source Pollutants

The table below specifies the pollutants for which the site is a major source:

Major Pollutants	None
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Reading State of Texas's Federal Operating Permit

The Title V Federal Operating Permit (FOP) lists all state and federal air emission regulations and New Source Review (NSR) authorizations (collectively known as "applicable requirements") that apply at a particular site or permit area (in the event a site has multiple FOPs). **The FOP does not authorize new emissions or new construction activities.** The FOP begins with an introductory page which is common to all Title V permits. This page gives the details of the company, states the authority of the issuing agency, requires the company to operate in accordance with this permit and 30 Texas Administrative Code (TAC) Chapter 122, requires adherence with NSR requirements of 30 TAC Chapter 116, and finally indicates the permit number and the issuance date.

This is followed by the table of contents, which is generally composed of the following elements. Not all permits will have all of the elements.

- General Terms and Conditions
- Special Terms and Conditions
 - Emissions Limitations and Standards, Monitoring and Testing, and Recordkeeping and Reporting
 - Additional Monitoring Requirements
 - New Source Review Authorization Requirements
 - Compliance Requirements
 - Protection of Stratosphere Ozone
 - Permit Location

- Permit Shield (30 TAC § 122.148)
- Attachments
 - Applicable Requirements Summary
 - Unit Summary
 - Applicable Requirements Summary
 - Additional Monitoring Requirements
 - Permit Shield
 - New Source Review Authorization References
 - Compliance Plan
 - Alternative Requirements
- Appendix A
 - Acronym list

General Terms and Conditions

The General Terms and Conditions are the same and appear in all permits. The first paragraph lists the specific citations for 30 TAC Chapter 122 requirements that apply to all Title V permit holders. The second paragraph describes the requirements for record retention. The third paragraph provides details for voiding the permit, if applicable. The fourth paragraph states that the permit holder shall comply with the requirements of 30 TAC Chapter 116 by obtaining a New Source Review authorization prior to new construction or modification of emission units located in the area covered by this permit. The fifth paragraph provides details on submission of reports required by the permit.

Special Terms and Conditions

Emissions Limitations and Standards, Monitoring and Testing, and Recordkeeping and Reporting. The TCEQ has designated certain applicable requirements as site-wide requirements. A site-wide requirement is a requirement that applies uniformly to all the units or activities at the site. Units with only site-wide requirements are addressed on Form OP-REQ1 and are not required to be listed separately on a OP-UA Form or Form OP-SUM. Form OP-SUM must list all units addressed in the application and provide identifying information, applicable OP-UA Forms, and preconstruction authorizations. The various OP-UA Forms provide the characteristics of each unit from which applicable requirements are established. Some exceptions exist as a few units may have both site-wide requirements and unit specific requirements.

Other conditions. The other entries under special terms and conditions are in general terms referring to compliance with the more detailed data listed in the attachments.

Attachments

Applicable Requirements Summary. The first attachment, the Applicable Requirements Summary, has two tables, addressing unit specific requirements. The first table, the Unit Summary, includes a list of units with applicable requirements, the unit type, the applicable regulation, and the requirement driver. The intent of the requirement driver is to inform the reader that a given unit may have several different operating scenarios and the differences between those operating scenarios.

The applicable requirements summary table provides the detailed citations of the rules that apply to the various units. For each unit and operating scenario, there is an added modifier called the “index number,” detailed citations specifying monitoring and testing requirements, recordkeeping requirements, and reporting requirements. The data for this table are based on data supplied by the applicant on the OP-SUM and various OP-UA forms.

Additional Monitoring Requirement. The next attachment includes additional monitoring the applicant must perform to ensure compliance with the applicable standard. Compliance assurance monitoring (CAM) is often required to provide a reasonable assurance of compliance with applicable emission limitations/standards for large emission units that use control devices to achieve compliance with applicant requirements. When necessary, periodic monitoring (PM) requirements are specified for certain parameters (i.e. feed rates, flow rates, temperature, fuel type and consumption, etc.) to determine if a term and condition or emission unit is operating within specified limits to control emissions. These additional monitoring approaches may be required for two reasons. First, the applicable rules do not adequately specify monitoring requirements (exception- Maximum Achievable Control Technology Standards (MACTs) generally have sufficient monitoring), and second, monitoring may be required to fill gaps in the monitoring requirements of certain

applicable requirements. In situations where the NSR permit is the applicable requirement requiring extra monitoring for a specific emission unit, the preferred solution is to have the monitoring requirements in the NSR permit updated so that all NSR requirements are consolidated in the NSR permit.

Permit Shield. A permit may or may not have a permit shield, depending on whether an applicant has applied for, and justified the granting of, a permit shield. A permit shield is a special condition included in the permit document stating that compliance with the conditions of the permit shall be deemed compliance with the specified potentially applicable requirement(s) or specified applicable state-only requirement(s).

New Source Review Authorization References. All activities which are related to emissions in the state of Texas must have a NSR authorization prior to beginning construction. This section lists all units in the permit and the NSR authorization that allowed the unit to be constructed or modified. Units that do not have unit specific applicable requirements other than the NSR authorization do not need to be listed in this attachment. While NSR permits are not physically a part of the Title V permit, they are legally incorporated into the Title V permit by reference. Those NSR permits whose emissions exceed certain PSD/NA thresholds must also undergo a Federal review of federally regulated pollutants in addition to review for state regulated pollutants.

Compliance Plan. A permit may have a compliance schedule attachment for listing corrective actions plans for any emission unit that is out of compliance with an applicable requirement.

Alternative Requirements. This attachment will list any alternative monitoring plans or alternative means of compliance for applicable requirements that have been approved by the EPA Administrator and/or the TCEQ Executive Director.

Appendix A

Acronym list. This attachment lists the common acronyms used when discussing the FOPs.

Stationary Vents subject to 30 TAC Chapter 111

All stationary vents subject to 30 TAC Chapter 111 are listed in the permit's Applicable Requirement Summary. The basis for the applicability determinations for these vents are listed in the Determination of Applicable Requirements table.

Federal Regulatory Applicability Determinations

The following chart summarizes the applicability of the principal air pollution regulatory programs to the permit area:

Regulatory Program	Applicability (Yes/No)
Prevention of Significant Deterioration (PSD)	No
Nonattainment New Source Review (NNSR)	No
Minor NSR	Yes
40 CFR Part 60 - New Source Performance Standards	Yes
40 CFR Part 61 - National Emission Standards for Hazardous Air Pollutants (NESHAPs)	No
40 CFR Part 63 - NESHAPs for Source Categories	Yes
Title IV (Acid Rain) of the Clean Air Act (CAA)	No

Regulatory Program	Applicability (Yes/No)
Title V (Federal Operating Permits) of the CAA	Yes
Title VI (Stratospheric Ozone Protection) of the CAA	No
CSAPR (Cross-State Air Pollution Rule)	No

Basis for Applying Permit Shields

An operating permit applicant has the opportunity to specifically request a permit shield to document that specific applicable requirements do not apply to emission units in the permit. A permit shield is a special condition stating that compliance with the conditions of the permit shall be deemed compliance with the specified potentially applicable requirements or specified potentially applicable state-only requirements. A permit shield has been requested in the application for specific emission units. For the permit shield requests that have been approved, the basis of determination for regulations that the owner/operator need not comply with are located in the "Permit Shield" attachment of the permit.

Insignificant Activities

In general, units not meeting the criteria for inclusion on either Form OP-SUM or Form OP-REQ1 are not required to be addressed in the operating permit application. Examples of these types of units include, but are not limited to, the following:

- Office activities such as photocopying, blueprint copying, and photographic processes.
- Sanitary sewage collection and treatment facilities other than those used to incinerate wastewater treatment plant sludge. Stacks or vents for sanitary sewer plumbing traps are also included.
- Food preparation facilities including, but not limited to, restaurants and cafeterias used for preparing food or beverages primarily for consumption on the premises.
- Outdoor barbecue pits, campfires, and fireplaces.
- Laundry dryers, extractors, and tumblers processing bedding, clothing, or other fabric items generated primarily at the premises. This does not include emissions from dry cleaning systems using perchloroethylene or petroleum solvents.
- Facilities storing only dry, sweet natural gas, including natural gas pressure regulator vents.
- Any air separation or other industrial gas production, storage, or packaging facility. Industrial gases, for purposes of this list, include only oxygen, nitrogen, helium, neon, argon, krypton, and xenon.
- Storage and handling of sealed portable containers, cylinders, or sealed drums.
- Vehicle exhaust from maintenance or repair shops.
- Storage and use of non-VOC products or equipment for maintaining motor vehicles operated at the site (including but not limited to, antifreeze and fuel additives).
- Air contaminant detectors and recorders, combustion controllers and shut-off devices, product analyzers, laboratory analyzers, continuous emissions monitors, other analyzers and monitors, and emissions associated with sampling activities. Exception to this category includes sampling activities that are deemed fugitive emissions and under a regulatory leak detection and repair program.
- Bench scale laboratory equipment and laboratory equipment used exclusively for chemical and physical analysis, including but not limited to, assorted vacuum producing devices and laboratory fume hoods.
- Steam vents, steam leaks, and steam safety relief valves, provided the steam (or boiler feed-water) has not contacted other materials or fluids containing regulated air pollutants other than boiler water treatment chemicals.
- Storage of water that has not contacted other materials or fluids containing regulated air pollutants other than boiler water treatment chemicals.
- Well cellars.
- Fire or emergency response equipment and training, including but not limited to, use of fire control equipment including equipment testing and training, and open burning of materials or fuels associated with firefighting training.
- Crucible or pot furnaces with a brim full capacity of less than 450 cubic inches of any molten metal.

18. Equipment used exclusively for the melting or application of wax.
19. All closed tumblers used for the cleaning or deburring of metal products without abrasive blasting, and all open tumblers with a batch capacity of 1,000 lbs. or less.
20. Shell core and shell mold manufacturing machines.
21. Sand or investment molds with a capacity of 100 lbs. or less used for the casting of metals;
22. Equipment used for inspection of metal products.
23. Equipment used exclusively for rolling, forging, pressing, drawing, spinning, or extruding either hot or cold metals by some mechanical means.
24. Instrument systems utilizing air, natural gas, nitrogen, oxygen, carbon dioxide, helium, neon, argon, krypton, and xenon.
25. Battery recharging areas.
26. Brazing, soldering, or welding equipment.

Determination of Applicable Requirements

The tables below include the applicability determinations for the emission units, the index number(s) where applicable, and all relevant unit attribute information used to form the basis of the applicability determination. The unit attribute information is a description of the physical properties of an emission unit which is used to determine the requirements to which the permit holder must comply. For more information about the descriptions of the unit attributes specific Unit Attribute Forms may be viewed at www.tceq.texas.gov/permitting/air/nav/air_all_ua_forms.html.

A list of unit attribute forms is included at the end of this document. Some examples of unit attributes include construction date; product stored in a tank; boiler fuel type; etc.. Generally, multiple attributes are needed to determine the requirements for a given emission unit and index number. The table below lists these attributes in the column entitled "Basis of Determination." Attributes that demonstrate that an applicable requirement applies will be the factual basis for the specific citations in an applicable requirement that apply to a unit for that index number. The TCEQ Air Permits Division has developed flowcharts for determining applicability of state and federal regulations based on the unit attribute information in a Decision Support System (DSS). These flowcharts can be accessed via the internet at www.tceq.texas.gov/permitting/air/nav/air_supportsys.html. The Air Permits Division staff may also be contacted for assistance at (512) 239-1250.

The attributes for each unit and corresponding index number provide the basis for determining the specific legal citations in an applicable requirement that apply, including emission limitations or standards, monitoring, recordkeeping, and reporting. The rules were found to apply or not apply by using the unit attributes as answers to decision questions found in the flowcharts of the DSS. Some additional attributes indicate which legal citations of a rule apply. The legal citations that apply to each emission unit may be found in the Applicable Requirements Summary table of the draft permit. There may be some entries or rows of units and rules not found in the permit, or if the permit contains a permit shield, repeated in the permit shield area. These are sets of attributes that describe negative applicability, or; in other words, the reason why a potentially applicable requirement does not apply.

If applicability determinations have been made which differ from the available flowcharts, an explanation of the decisions involved in the applicability determination is specified in the column "Changes and Exceptions to RRT." If there were no exceptions to the DSS, then this column has been removed.

The draft permit includes all emission limitations or standards, monitoring, recordkeeping and reporting required by each applicable requirement. If an applicable requirement does not require monitoring, recordkeeping, or reporting, the word "None" will appear in the Applicable Requirements Summary table. If additional periodic monitoring is required for an applicable requirement, it will be explained in detail in the portion of this document entitled "Rationale for Compliance Assurance Monitoring (CAM)/ Periodic Monitoring Methods Selected."

When attributes demonstrate that a unit is not subject to an applicable requirement, the applicant may request a permit shield for those items. The portion of this document entitled "Basis for Applying Permit Shields" specifies which units, if any, have a permit shield.

Operational Flexibility

When an emission unit has multiple operating scenarios, it will have a different index number associated with each operating condition. This means that units are permitted to operate under multiple operating conditions. The applicable requirements for each operating condition are determined by a unique set of unit attributes. For example, a tank may store two different products at different points in time. The tank may, therefore, need to comply with two distinct sets of requirements, depending on the product that is stored. Both sets of requirements are included in the permit, so that the permit holder may store either product in the tank.

Determination of Applicable Requirements

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
GRP-TANKS2	30 TAC Chapter 115, Storage of VOCs	R5112-1	<p>Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.</p> <p>Tank Description = Tank using a submerged fill pipe</p> <p>Product Stored = VOC other than crude oil or condensate</p> <p>True Vapor Pressure = True vapor pressure is greater than or equal to 1.5 psia</p> <p>Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons</p> <p>Potential to Emit = The uncontrolled VOC emissions from the individual tank, or from the aggregate of storage tanks in a tank battery, is less than 25 tons per year.</p>	
GRP-TANKS2	40 CFR Part 60, Subpart Kb	60Kb-1	<p>Product Stored = Volatile organic liquid</p> <p>Storage Capacity = Capacity is less than 10,600 gallons (40,000 liters)</p>	
GRP-TANKS4	30 TAC Chapter 115, Storage of VOCs	R5112-2	<p>Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.</p> <p>Product Stored = Other than crude oil, condensate, or VOC</p>	
GRP-TANKS4	40 CFR Part 60, Subpart Kb	60KB-2	Product Stored = Stored product other than volatile organic liquid or petroleum liquid	
GRP-TANKS5	30 TAC Chapter 115, Storage of VOCs	R5112-2	Product Stored = Other than crude oil, condensate, or VOC	
GRP-TANKS5	40 CFR Part 60, Subpart Kb	60KB-2	Product Stored = Stored product other than volatile organic liquid or petroleum liquid	
T9100	30 TAC Chapter 115, Storage of VOCs	R5112-2	<p>Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.</p> <p>Tank Description = Tank does not require emission controls</p> <p>Product Stored = VOC other than crude oil or condensate</p> <p>True Vapor Pressure = True vapor pressure is less than 1.0 psia</p> <p>Storage Capacity = Capacity is greater than 25,000 gallons but less than or equal to 40,000 gallons</p>	
T9100	40 CFR Part 60, Subpart Kb	60KB-2	<p>Product Stored = Volatile organic liquid</p> <p>Storage Capacity = Capacity is greater than or equal to 19,800 gallons (75,000 liters) but less than 39,900 gallons (151,000 liters)</p>	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
			Maximum True Vapor Pressure = True vapor pressure is less than 2.2 psia	
T9103	30 TAC Chapter 115, Storage of VOCs	R5112-1	<p>Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.</p> <p>Tank Description = Tank does not require emission controls</p> <p>Product Stored = VOC other than crude oil or condensate</p> <p>True Vapor Pressure = True vapor pressure is less than 1.0 psia</p> <p>Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons</p> <p>Potential to Emit = The uncontrolled VOC emissions from the individual tank, or from the aggregate of storage tanks in a tank battery, is less than 25 tons per year.</p>	
T9103	40 CFR Part 60, Subpart Kb	60Kb-1	<p>Product Stored = Volatile organic liquid</p> <p>Storage Capacity = Capacity is greater than or equal to 10,600 gallons (40,000 liters) but less than 19,800 gallons (75,000 liters)</p>	
T9105	30 TAC Chapter 115, Storage of VOCs	R5112-1	<p>Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.</p> <p>Tank Description = Tank does not require emission controls</p> <p>Product Stored = VOC other than crude oil or condensate</p> <p>True Vapor Pressure = True vapor pressure is less than 1.0 psia</p> <p>Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons</p> <p>Potential to Emit = The uncontrolled VOC emissions from the individual tank, or from the aggregate of storage tanks in a tank battery, is less than 25 tons per year.</p>	
T9105	40 CFR Part 60, Subpart Kb	60Kb-1	<p>Product Stored = Waste mixture of indeterminate or variable composition</p> <p>Storage Capacity = Capacity is less than 10,600 gallons (40,000 liters)</p>	
T9105	40 CFR Part 63, Subpart VVVVVV	R5112-6V	<p>Storage Capacity = Storage capacity is less than 20,000 gallons.</p> <p>MTVP of HAP = Maximum true vapor pressure of HAP is at least 27.6 kPa but less than 76.6 kPa at storage temperature.</p>	
T9106	30 TAC Chapter 115, Storage of VOCs	R5112-1	<p>Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria.</p> <p>Tank Description = Tank does not require emission controls</p> <p>Product Stored = VOC other than crude oil or condensate</p> <p>True Vapor Pressure = True vapor pressure is less than 1.0 psia</p> <p>Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons</p>	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
			Potential to Emit = The uncontrolled VOC emissions from the individual tank, or from the aggregate of storage tanks in a tank battery, is less than 25 tons per year.	
T9106	40 CFR Part 60, Subpart Kb	60Kb-1	Product Stored = Volatile organic liquid Storage Capacity = Capacity is less than 10,600 gallons (40,000 liters)	
T9106	40 CFR Part 63, Subpart VVVVVV	R5112-6V	Storage Capacity = Storage capacity is less than 20,000 gallons. MTVP of HAP = Maximum true vapor pressure of HAP is at least 27.6 kPa but less than 76.6 kPa at storage temperature.	
T9107	30 TAC Chapter 115, Storage of VOCs	R5112-1	Alternate Control Requirement = Not using an alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria. Tank Description = Tank does not require emission controls Product Stored = VOC other than crude oil or condensate True Vapor Pressure = True vapor pressure is less than 1.0 psia Storage Capacity = Capacity is greater than 1,000 gallons but less than or equal to 25,000 gallons Potential to Emit = The uncontrolled VOC emissions from the individual tank, or from the aggregate of storage tanks in a tank battery, is less than 25 tons per year.	
T9107	40 CFR Part 60, Subpart Kb	60Kb-1	Product Stored = Volatile organic liquid Storage Capacity = Capacity is less than 10,600 gallons (40,000 liters)	
LOAD	30 TAC Chapter 115, Loading and Unloading of VOC	R5211-1	Chapter 115 Facility Type = Facility type other than a gasoline terminal, gasoline bulk plant, motor vehicle fuel dispensing facility or marine terminal. Alternate Control Requirement (ACR) = No alternate control requirements are being utilized. Product Transferred = Volatile organic compounds other than liquefied petroleum gas and gasoline. Transfer Type = Only loading. True Vapor Pressure = True vapor pressure less than 0.5 psia.	
LOAD	30 TAC Chapter 115, Loading and Unloading of VOC	R5211-2	Chapter 115 Facility Type = Facility type other than a gasoline terminal, gasoline bulk plant, motor vehicle fuel dispensing facility or marine terminal. Alternate Control Requirement (ACR) = No alternate control requirements are being utilized. Product Transferred = Volatile organic compounds other than liquefied petroleum gas and gasoline. Transfer Type = Only loading. True Vapor Pressure = True vapor pressure greater than or equal to 0.5 psia. Daily Throughput = Loading less than 20,000 gallons per day.	
UNLOAD	30 TAC Chapter	R5211-3	Chapter 115 Facility Type = Facility type other than a gasoline terminal, gasoline bulk plant,	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
	115, Loading and Unloading of VOC		<p>motor vehicle fuel dispensing facility or marine terminal.</p> <p>Alternate Control Requirement (ACR) = No alternate control requirements are being utilized.</p> <p>Product Transferred = Volatile organic compounds other than liquefied petroleum gas and gasoline.</p> <p>Transfer Type = Only unloading.</p> <p>True Vapor Pressure = True vapor pressure less than 0.5 psia.</p>	
UNLOAD	30 TAC Chapter 115, Loading and Unloading of VOC	R5211-4	<p>Chapter 115 Facility Type = Facility type other than a gasoline terminal, gasoline bulk plant, motor vehicle fuel dispensing facility or marine terminal.</p> <p>Alternate Control Requirement (ACR) = No alternate control requirements are being utilized.</p> <p>Product Transferred = Volatile organic compounds other than liquefied petroleum gas and gasoline.</p> <p>Transfer Type = Only unloading.</p> <p>True Vapor Pressure = True vapor pressure greater than or equal to 0.5 psia.</p> <p>Daily Throughput = Loading less than 20,000 gallons per day.</p>	<p>-- Affected Pollutant - VOC:</p> <p><u>Recordkeeping</u> – Deleted citation §115.216(3)(D) as this refers to loading of VOC. This unit is for unloading of VOC only.</p>
B-1	40 CFR Part 60, Subpart Dc	60Dc-1	<p>Construction/Modification Date = After February 28, 2005.</p> <p>PM Monitoring Type = No particulate monitoring.</p> <p>Maximum Design Heat Input Capacity = Maximum design heat input capacity is greater than or equal to 10 MMBtu/hr (2.9 MW) but less than or equal to 100 MMBtu (29 MW).</p> <p>SO2 Inlet Monitoring Type = No SO₂ monitoring.</p> <p>Other Subparts = The facility is not covered under 40 CFR Part 60, Subparts AAAA or KKKK, or under an approved State or Federal section 111(d)/129 plan implementing 40 CFR Part 60, Subpart BBBB.</p> <p>SO2 Outlet Monitoring Type = No SO₂ monitoring.</p> <p>Heat Input Capacity = Heat input capacity is greater than or equal to 30 MMBtu/hr (8.7 MW) but less than or equal to 75 MMBtu/hr (22 MW).</p> <p>Technology Type = None.</p> <p>D-Series Fuel Type = Natural gas.</p> <p>47C-Option = COMS exemption § 60.47c(c) for a facility burning only distillate oil containing 0.5 % or less by weight sulfur and/or liquid or gaseous fuels with potential SO₂ emission rates of no more than 26 ng/J (0.060 lb/MMBtu), no post-combustion technology</p> <p>ACF Option - SO2 = Other ACF or no ACF.</p> <p>ACF Option - PM = Other ACF or no ACF.</p> <p>30% Coal Duct Burner = The facility does not combust coal in a duct burner as part of a combined cycle system; or more than 30% of the heat is from combustion of coal and less than 70% is from exhaust gases entering the duct burner.</p>	
FLAREA	30 TAC Chapter 111, Visible Emissions	R1111-1	<p>Acid Gases Only = Flare is not used only as an acid gas flare as defined in 30 TAC § 101.1.</p> <p>Emergency/Upset Conditions Only = Flare is used under conditions other than emergency or upset conditions.</p>	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
FLAREA	40 CFR Part 63, Subpart A	63A-1	Required Under 40 CFR Part 63 = Flare is required by a Subpart under 40 CFR Part 63. Heat Content Specification = Adhering to the heat content specifications in 40 CFR § 63.11(b)(6)(ii) and the maximum tip velocity specifications in 40 CFR § 63.11(b)(7) or 40 CFR § 63.11(b)(8). Flare Assist Type = Air assisted	
FLAREC	30 TAC Chapter 111, Visible Emissions	R1111-2	Acid Gases Only = Flare is not used only as an acid gas flare as defined in 30 TAC § 101.1. Emergency/Upset Conditions Only = Flare is used under conditions other than emergency or upset conditions.	
FLAREC	40 CFR Part 63, Subpart A	R1111-2	Required Under 40 CFR Part 63 = Flare is not required by a Subpart under 40 CFR Part 63.	
FUG-BC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	R5311-1	Title 30 TAC § 115.352 Applicable = Site is not a petroleum refinery, synthetic organic chemical, polymer resin or methyl-tert-butyl-ether manufacturing process nor a natural gas/gasoline processing operation as defined in 30 TAC 115.10.	
FUG-BC	40 CFR Part 63, Subpart VVVVVV	63VVVVVV-1	CMPU Equipment = Equipment is part of a CMPU in organic or metal HAP service.	
FUGNONBC	30 TAC Chapter 115, Pet. Refinery & Petrochemicals	R5311-1	Title 30 TAC § 115.352 Applicable = Site is not a petroleum refinery, synthetic organic chemical, polymer resin or methyl-tert-butyl-ether manufacturing process nor a natural gas/gasoline processing operation as defined in 30 TAC 115.10.	
FUGNONBC	40 CFR Part 63, Subpart VVVVVV	63MV-001	CMPU Equipment = Equipment is not part of a CMPU in organic or metal HAP service.	
B-1	30 TAC Chapter 111, Visible Emissions	R1111-1	Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113. Vent Source = The source of the vent is not a steam generator fired by solid fossil fuel, oil or a mixture of oil and gas and is not a catalyst regenerator for a fluid bed catalytic cracking unit. Opacity Monitoring System = Optical instrument capable of measuring the opacity of emissions is not installed in the vent or optical instrumentation does not meet the requirements of § 111.111(a)(1)(D), or the vent stream does not qualify for the exemption in § 111.111(a)(3). Construction Date = After January 31, 1972 Effluent Flow Rate = Effluent flow rate is less than 100,000 actual cubic feet per minute.	
FLAREA	40 CFR Part 63, Subpart VVVVVV	63VVVVVV-1	TRE Index Value = TRE index is not calculated and continuous process vents are controlled to levels in Table 3 of 40 CFR Part 63, Subpart VVVVVV. Recovery Device = Recovery device other than an absorber, carbon adsorber or condenser is used.	
GRP-TANKS2	30 TAC Chapter 111, Visible Emissions	R1111-2	Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113. Vent Source = The source of the vent is from colorless VOCs, non-fuming liquids, or other sources that are not capable of producing visible emissions. Periodic monitoring to	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
			<p>demonstrate compliance is not required.</p> <p>Opacity Monitoring System = Optical instrument capable of measuring the opacity of emissions is not installed in the vent or optical instrumentation does not meet the requirements of § 111.111(a)(1)(D), or the vent stream does not qualify for the exemption in § 111.111(a)(3).</p> <p>Construction Date = After January 31, 1972</p> <p>Effluent Flow Rate = Effluent flow rate is less than 100,000 actual cubic feet per minute.</p>	
GRP-TANKS4	30 TAC Chapter 111, Visible Emissions	R1111-2	<p>Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113.</p> <p>Vent Source = The source of the vent is from colorless VOCs, non-fuming liquids, or other sources that are not capable of producing visible emissions. Periodic monitoring to demonstrate compliance is not required.</p> <p>Opacity Monitoring System = Optical instrument capable of measuring the opacity of emissions is not installed in the vent or optical instrumentation does not meet the requirements of § 111.111(a)(1)(D), or the vent stream does not qualify for the exemption in § 111.111(a)(3).</p> <p>Construction Date = After January 31, 1972</p> <p>Effluent Flow Rate = Effluent flow rate is less than 100,000 actual cubic feet per minute.</p>	
GRP-TANKS5	30 TAC Chapter 111, Visible Emissions	R1111-2	<p>Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113.</p> <p>Vent Source = The source of the vent is from colorless VOCs, non-fuming liquids, or other sources that are not capable of producing visible emissions. Periodic monitoring to demonstrate compliance is not required.</p> <p>Opacity Monitoring System = Optical instrument capable of measuring the opacity of emissions is not installed in the vent or optical instrumentation does not meet the requirements of § 111.111(a)(1)(D), or the vent stream does not qualify for the exemption in § 111.111(a)(3).</p> <p>Construction Date = After January 31, 1972</p> <p>Effluent Flow Rate = Effluent flow rate is less than 100,000 actual cubic feet per minute.</p>	
T9100	30 TAC Chapter 111, Visible Emissions	R1111-2	<p>Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113.</p> <p>Vent Source = The source of the vent is from colorless VOCs, non-fuming liquids, or other sources that are not capable of producing visible emissions. Periodic monitoring to demonstrate compliance is not required.</p> <p>Opacity Monitoring System = Optical instrument capable of measuring the opacity of emissions is not installed in the vent or optical instrumentation does not meet the requirements of § 111.111(a)(1)(D), or the vent stream does not qualify for the exemption in § 111.111(a)(3).</p> <p>Construction Date = After January 31, 1972</p> <p>Effluent Flow Rate = Effluent flow rate is less than 100,000 actual cubic feet per minute.</p>	
T9103	30 TAC Chapter 111, Visible Emissions	R1111-2	<p>Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113.</p> <p>Vent Source = The source of the vent is from colorless VOCs, non-fuming liquids, or other sources that are not capable of producing visible emissions. Periodic monitoring to demonstrate compliance is not required.</p>	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
			<p>Opacity Monitoring System = Optical instrument capable of measuring the opacity of emissions is not installed in the vent or optical instrumentation does not meet the requirements of § 111.111(a)(1)(D), or the vent stream does not qualify for the exemption in § 111.111(a)(3).</p> <p>Construction Date = After January 31, 1972</p> <p>Effluent Flow Rate = Effluent flow rate is less than 100,000 actual cubic feet per minute.</p>	
T9105	30 TAC Chapter 111, Visible Emissions	R1111-2	<p>Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113.</p> <p>Vent Source = The source of the vent is from colorless VOCs, non-fuming liquids, or other sources that are not capable of producing visible emissions. Periodic monitoring to demonstrate compliance is not required.</p> <p>Opacity Monitoring System = Optical instrument capable of measuring the opacity of emissions is not installed in the vent or optical instrumentation does not meet the requirements of § 111.111(a)(1)(D), or the vent stream does not qualify for the exemption in § 111.111(a)(3).</p> <p>Construction Date = After January 31, 1972</p> <p>Effluent Flow Rate = Effluent flow rate is less than 100,000 actual cubic feet per minute.</p>	
T9106	30 TAC Chapter 111, Visible Emissions	R1111-2	<p>Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113.</p> <p>Vent Source = The source of the vent is from colorless VOCs, non-fuming liquids, or other sources that are not capable of producing visible emissions. Periodic monitoring to demonstrate compliance is not required.</p> <p>Opacity Monitoring System = Optical instrument capable of measuring the opacity of emissions is not installed in the vent or optical instrumentation does not meet the requirements of § 111.111(a)(1)(D), or the vent stream does not qualify for the exemption in § 111.111(a)(3).</p> <p>Construction Date = After January 31, 1972</p> <p>Effluent Flow Rate = Effluent flow rate is less than 100,000 actual cubic feet per minute.</p>	
T9107	30 TAC Chapter 111, Visible Emissions	R1111-2	<p>Alternate Opacity Limitation = Not complying with an alternate opacity limit under 30 TAC § 111.113.</p> <p>Vent Source = The source of the vent is from colorless VOCs, non-fuming liquids, or other sources that are not capable of producing visible emissions. Periodic monitoring to demonstrate compliance is not required.</p> <p>Opacity Monitoring System = Optical instrument capable of measuring the opacity of emissions is not installed in the vent or optical instrumentation does not meet the requirements of § 111.111(a)(1)(D), or the vent stream does not qualify for the exemption in § 111.111(a)(3).</p> <p>Construction Date = After January 31, 1972</p> <p>Effluent Flow Rate = Effluent flow rate is less than 100,000 actual cubic feet per minute.</p>	
BASINS	30 TAC Chapter 115, Industrial Wastewater	R5140-2	<p>Petroleum Refinery = The affected source category is not a petroleum refinery.</p> <p>Wastewater Component Type = The component is not a wet weather retention basin, exempted by §115.147(2), not a bio-treatment unit.</p> <p>Alternate Control Requirement = An alternate control requirement (ACR) or exemption criteria in accordance with 30 TAC § 115.910 is not used.</p>	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
			<p>Roof or Seal Type = The wastewater component does not have a floating roof or internal floating roof.</p> <p>Control Devices = Control device other than a carbon adsorber, condenser, catalytic incinerator, enclosed non-catalytic combustion device, flare, steam stripper or vapor combustor.</p> <p>90% Overall Control Option = The unit is complying with the control requirements of 30 TAC § 115.142.</p> <p>Monitoring Type = The monitoring requirements of 30 TAC §§ 115.144(3)(A) - (H) are being used.</p> <p>Safety Hazard Exemption = No safety hazard exemption has been requested or none has been approved.</p>	
GRP-WWTKS	30 TAC Chapter 115, Industrial Wastewater	R5140-2	<p>Petroleum Refinery = The affected source category is not a petroleum refinery.</p> <p>Wastewater Component Type = The component is not a wet weather retention basin, exempted by §115.147(2), not a bio-treatment unit.</p> <p>Alternate Control Requirement = An alternate control requirement (ACR) or exemption criteria in accordance with 30 TAC § 115.910 is not used.</p> <p>Roof or Seal Type = The wastewater component does not have a floating roof or internal floating roof.</p> <p>Control Devices = Control device other than a carbon adsorber, condenser, catalytic incinerator, enclosed non-catalytic combustion device, flare, steam stripper or vapor combustor.</p> <p>90% Overall Control Option = The unit is complying with the control requirements of 30 TAC § 115.142.</p> <p>Monitoring Type = The monitoring requirements of 30 TAC §§ 115.144(3)(A) - (H) are being used.</p> <p>Safety Hazard Exemption = No safety hazard exemption has been requested or none has been approved.</p>	
WWTP-01	30 TAC Chapter 115, Industrial Wastewater	R5140-1	<p>Petroleum Refinery = The affected source category is not a petroleum refinery.</p> <p>Wastewater Component Type = A properly operated bio-treatment unit.</p> <p>Alternate Control Requirement = An alternate control requirement (ACR) or exemption criteria in accordance with 30 TAC § 115.910 is not used.</p> <p>90% Overall Control Option = The unit is complying with the control requirements of 30 TAC § 115.142.</p> <p>Safety Hazard Exemption = No safety hazard exemption has been requested or none has been approved.</p>	
NON-BC	30 TAC Chapter 115, Phar. Man. Facilities	R5511-1	<p>Air Dryers = The process includes air dryers or production equipment exhaust systems.</p> <p>Alternate Control Requirement = No alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria has been approved by the TCEQ Executive Director.</p> <p>Filters = The process contains rotary vacuum filters or other filters which have an exposed liquid surface which processes liquids containing VOC.</p>	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
			<p>Emissions <= 33 lbs/day = VOC emissions from all air dryers and production equipment exhaust systems are not reduced to less than or equal to 33 pounds per day (15 kilograms per day).</p> <p>Filter VOC Vapor Pressure Exemption = The process contains filters which process liquids containing VOC with vapor pressure greater than or equal to 0.5 psia (3.4 kilopascals) at 68°F (20°C) or is not claiming the exemption.</p> <p>Other Filters = The process contains filters which process liquids containing VOC with vapor pressure greater than or equal to 0.5 psia (3.4 kilopascals) at 68°F (20°C).</p> <p>Storage Tanks at Loading Facility = The process produces VOC emissions from truck or railcar deliveries to storage tanks at loading facilities.</p> <p>Combined Weight of Uncontrolled VOC Emissions = The unit emits an uncontrolled combined weight of VOC greater than or equal to 15 pounds in at least one continuous 24-hour period.</p> <p>Loading Facility Storage Tank Capacity Exemption = The process contains only storage tanks at loading facilities with capacities greater than 2,000 gallons (7,571 liters) or is not claiming the exemption.</p> <p>Vapor Recovery System = A portion of the facility utilizes a vapor recovery system to comply with an emission specification in 30 TAC § 115.531 or a control requirement in 30 TAC § 115.532.</p> <p>Control Device Type = Control device other than a carbon adsorption system, direct flame incinerator or a solvent recovery system other than a carbon adsorption system.</p> <p>Loading Facility Storage Tank VOC Vapor Pressure Exemption = The process contains storage tanks at loading facilities that store VOC with vapor pressure less than or equal to 4.1 psia (28 kilopascals) at 68°F (20°C).</p> <p>Reactors = The process includes reactors, distillation units, crystallizers, centrifuges or vacuum dryers.</p> <p>Centrifuge VOC Vapor Pressure Exemption = The process contains no centrifuges which process liquids containing VOC with vapor pressure less than 0.5 psia (3.4 kilopascals) at 68°F (20°C) or is not claiming the exemption.</p> <p>In-Process Tanks = The process includes in-process tanks that contain VOC.</p> <p>Storage Tank VOC Vapor Pressure Exemption = The process contains only storage tanks containing VOC with a vapor pressure greater than 1.5 psia (10.3 kilopascals) at 68°F (20°C) or are not claiming the exemption.</p> <p>Other Storage Tanks = The process contains other storage tanks containing VOC with a vapor pressure greater than 1.5 psia (10.3 kilopascals) at 68°F (20°C).</p>	
NON-BC	30 TAC Chapter 115, Phar. Man. Facilities	R5511-2	<p>Air Dryers = The process includes air dryers or production equipment exhaust systems.</p> <p>Alternate Control Requirement = No alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria has been approved by the TCEQ Executive Director.</p> <p>Filters = The process contains rotary vacuum filters or other filters which have an exposed liquid surface which processes liquids containing VOC.</p> <p>Emissions <= 33 lbs/day = VOC emissions from all air dryers and production equipment exhaust systems are not reduced to less than or equal to 33 pounds per day (15 kilograms per day).</p> <p>Filter VOC Vapor Pressure Exemption = The process contains filters which process liquids</p>	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
			<p>containing VOC with vapor pressure greater than or equal to 0.5 psia (3.4 kilopascals) at 68°F (20°C) or is not claiming the exemption.</p> <p>Other Filters = The process contains filters which process liquids containing VOC with vapor pressure greater than or equal to 0.5 psia (3.4 kilopascals) at 68°F (20°C).</p> <p>Storage Tanks at Loading Facility = The process produces VOC emissions from truck or railcar deliveries to storage tanks at loading facilities.</p> <p>Combined Weight of Uncontrolled VOC Emissions = The unit emits an uncontrolled combined weight of VOC greater than or equal to 15 pounds in at least one continuous 24-hour period.</p> <p>Loading Facility Storage Tank Capacity Exemption = The process contains only storage tanks at loading facilities with capacities greater than 2,000 gallons (7,571 liters) or is not claiming the exemption.</p> <p>Vapor Recovery System = A portion of the facility utilizes a vapor recovery system to comply with an emission specification in 30 TAC § 115.531 or a control requirement in 30 TAC § 115.532.</p> <p>Control Device Type = Control device other than a carbon adsorption system, direct flame incinerator or a solvent recovery system other than a carbon adsorption system.</p> <p>Loading Facility Storage Tank VOC Vapor Pressure Exemption = The process contains storage tanks at loading facilities that store VOC with vapor pressure less than or equal to 4.1 psia (28 kilopascals) at 68°F (20°C).</p> <p>Reactors = The process includes reactors, distillation units, crystallizers, centrifuges or vacuum dryers.</p> <p>Centrifuge VOC Vapor Pressure Exemption = The process contains no centrifuges which process liquids containing VOC with vapor pressure less than 0.5 psia (3.4 kilopascals) at 68°F (20°C) or is not claiming the exemption.</p> <p>In-Process Tanks = The process includes in-process tanks that contain VOC.</p> <p>Storage Tank VOC Vapor Pressure Exemption = The process contains storage tanks containing VOC with a vapor pressure less than or equal to 1.5 psia (10.3 kilopascals) at 68°F (20°C).</p> <p>Other Storage Tanks = The process contains other storage tanks containing VOC with a vapor pressure greater than 1.5 psia (10.3 kilopascals) at 68°F (20°C).</p>	
PROBC	30 TAC Chapter 115, Phar. Man. Facilities	R5511-1	<p>Air Dryers = The process includes air dryers or production equipment exhaust systems.</p> <p>Alternate Control Requirement = No alternate method for demonstrating and documenting continuous compliance with applicable control requirements or exemption criteria has been approved by the TCEQ Executive Director.</p> <p>Filters = The process contains rotary vacuum filters or other filters which have an exposed liquid surface which processes liquids containing VOC.</p> <p>Emissions <= 33 lbs/day = VOC emissions from all air dryers and production equipment exhaust systems are not reduced to less than or equal to 33 pounds per day (15 kilograms per day).</p> <p>Filter VOC Vapor Pressure Exemption = The process contains filters which process liquids containing VOC with vapor pressure greater than or equal to 0.5 psia (3.4 kilopascals) at 68°F (20°C) or is not claiming the exemption.</p> <p>Other Filters = The process contains filters which process liquids containing VOC with vapor pressure greater than or equal to 0.5 psia (3.4 kilopascals) at 68°F (20°C).</p>	

Unit ID	Regulation	Index Number	Basis of Determination*	Changes and Exceptions to DSS**
			<p>Storage Tanks at Loading Facility = The process produces VOC emissions from truck or railcar deliveries to storage tanks at loading facilities.</p> <p>Combined Weight of Uncontrolled VOC Emissions = The unit emits an uncontrolled combined weight of VOC greater than or equal to 15 pounds in at least one continuous 24-hour period.</p> <p>Loading Facility Storage Tank Capacity Exemption = The process contains only storage tanks at loading facilities with capacities greater than 2,000 gallons (7,571 liters) or is not claiming the exemption.</p> <p>Vapor Recovery System = A portion of the facility utilizes a vapor recovery system to comply with an emission specification in 30 TAC § 115.531 or a control requirement in 30 TAC § 115.532.</p> <p>Control Device Type = Control device other than a carbon adsorption system, direct flame incinerator or a solvent recovery system other than a carbon adsorption system.</p> <p>Loading Facility Storage Tank VOC Vapor Pressure Exemption = The process contains storage tanks at loading facilities that store VOC with vapor pressure less than or equal to 4.1 psia (28 kilopascals) at 68°F (20°C).</p> <p>Reactors = The process includes reactors, distillation units, crystallizers, centrifuges or vacuum dryers.</p> <p>Centrifuge VOC Vapor Pressure Exemption = The process contains no centrifuges which process liquids containing VOC with vapor pressure less than 0.5 psia (3.4 kilopascals) at 68°F (20°C) or is not claiming the exemption.</p> <p>In-Process Tanks = The process includes in-process tanks that contain VOC.</p> <p>Storage Tank VOC Vapor Pressure Exemption = The process contains only storage tanks containing VOC with a vapor pressure greater than 1.5 psia (10.3 kilopascals) at 68°F (20°C) or are not claiming the exemption.</p> <p>Other Storage Tanks = The process contains other storage tanks containing VOC with a vapor pressure greater than 1.5 psia (10.3 kilopascals) at 68°F (20°C).</p>	
GRP-WWTKS	40 CFR Part 63, Subpart VVVVVV	63VVVVVV-1	Wastewater = Wastewater streams are subject to 40 CFR Part 63, Subpart VVVVVV.	
PROBC	40 CFR Part 63, Subpart VVVVVV	63VVVVVV-1	CMPU = CMPU is subject to 40 CFR Part 63, Subpart VVVVVV	

* - The "unit attributes" or operating conditions that determine what requirements apply

** - Notes changes made to the automated results from the DSS, and a brief explanation why

NSR Versus Title V FOP

The state of Texas has two Air permitting programs, New Source Review (NSR) and Title V Federal Operating Permits. The two programs are substantially different both in intent and permit content.

NSR is a preconstruction permitting program authorized by the Texas Clean Air Act and Title I of the Federal Clean Air Act (FCAA). The processing of these permits is governed by 30 Texas Administrative Code (TAC) Chapter 116.111. The Title V Federal Operating Program is a federal program authorized under Title V of the FCAA that has been delegated to the state of Texas to administer and is governed by 30 TAC Chapter 122. The major differences between the two permitting programs are listed in the table below:

NSR Permit	Federal Operating Permit(FOP)
Issued Prior to new Construction or modification of an existing facility	For initial permit with application shield, can be issued after operation commences; significant revisions require approval prior to operation.
Authorizes air emissions	Codifies existing applicable requirements, does not authorize new emissions
Ensures issued permits are protective of the environment and human health by conducting a health effects review and that requirement for best available control technology (BACT) is implemented.	Applicable requirements listed in permit are used by the inspectors to ensure proper operation of the site as authorized. Ensures that adequate monitoring is in place to allow compliance determination with the FOP.
Up to two Public notices may be required. Opportunity for public comment and contested case hearings for some authorizations.	One public notice required. Opportunity for public comments. No contested case hearings.
Applies to all point source emissions in the state.	Applies to all major sources and some non-major sources identified by the EPA.
Applies to facilities: a portion of site or individual emission sources	One or multiple FOPs cover the entire site (consists of multiple facilities)
Permits include terms and conditions under which the applicant must construct and operate its various equipment and processes on a facility basis.	Permits include terms and conditions that specify the general operational requirements of the site; and also include codification of all applicable requirements for emission units at the site.
Opportunity for EPA review for Federal Prevention of Significant Deterioration (PSD) and Nonattainment (NA) permits for major sources.	Opportunity for EPA review, Affected states review, and a Public petition period for every FOP.
Permits have a table listing maximum emission limits for pollutants	Permit has an applicable requirements table and Periodic Monitoring (PM) / Compliance Assurance Monitoring (CAM) tables which document applicable monitoring requirements.
Permits can be altered or amended upon application by company. Permits must be issued before construction or modification of facilities can begin.	Permits can be revised through several revision processes, which provide for different levels of public notice and opportunity to comment. Changes that would be significant revisions require that a revised permit be issued before those changes can be operated.
NSR permits are issued independent of FOP requirements.	FOP are independent of NSR permits, but contain a list of all NSR permits incorporated by reference

New Source Review Requirements

Below is a list of the New Source Review (NSR) permits for the permitted area. These NSR permits are incorporated by reference into the operating permit and are enforceable under it. These permits can be found in the main TCEQ file room,

located on the first floor of Building E, 12100 Park 35 Circle, Austin, Texas. The Public Education Program may be contacted at 1-800-687-4040 or the Air Permits Division (APD) may be contacted at 1-512-239-1250 for help with any question.

Additionally, the site contains emission units that are permitted by rule under the requirements of 30 TAC Chapter 106, Permits by Rule. The following table specifies the permits by rule that apply to the site. All current permits by rule are contained in Chapter 106. Outdated 30 TAC Chapter 106 permits by rule may be viewed at the following Web site:

www.tceq.texas.gov/permitting/air/permitbyrule/historical_rules/old106list/index106.html

Outdated Standard Exemption lists may be viewed at the following Web site:

www.tceq.texas.gov/permitting/air/permitbyrule/historical_rules/oldselist/se_index.html

The status of air permits and applications and a link to the Air Permits Remote Document Server is located at the following Web site:

www.tceq.texas.gov/permitting/air/nav/air_status_permits.html

New Source Review Authorization References

Title 30 TAC Chapter 116 Permits, Special Permits, and Other Authorizations (Other Than Permits By Rule, PSD Permits, or NA Permits) for the Application Area.	
Authorization No.: 19797	Issuance Date: 11/10/2014
Permits By Rule (30 TAC Chapter 106) for the Application Area	
Number: 106.371	Version No./Date: 09/04/2000
Number: 106.478	Version No./Date: 09/04/2000

Emission Units and Emission Points

In air permitting terminology, any source capable of generating emissions (for example, an engine or a sandblasting area) is called an Emission Unit. For purposes of Title V, emission units are specifically listed in the operating permit when they have applicable requirements other than New Source Review (NSR), or when they are listed in the permit shield table.

The actual physical location where the emissions enter the atmosphere (for example, an engine stack or a sand-blasting yard) is called an emission point. For New Source Review preconstruction permitting purposes, every emission unit has an associated emission point. Emission limits are listed in an NSR permit, associated with an emission point. This list of emission points and emission limits per pollutant is commonly referred to as the "Maximum Allowable Emission Rate Table", or "MAERT" for short. Specifically, the MAERT lists the Emission Point Number (EPN) that identifies the emission point, followed immediately by the Source Name, identifying the emission unit that is the source of those emissions on this table.

Thus, by reference, an emission unit in a Title V operating permit is linked by reference number to an NSR authorization, and its related emission point.

Monitoring Sufficiency

Federal and state rules, 40 CFR § 70.6(a)(3)(i)(B) and 30 TAC § 122.142(c) respectively, require that each federal operating permit include additional monitoring for applicable requirements that lack periodic or instrumental monitoring (which may include recordkeeping that serves as monitoring) that yields reliable data from a relevant time period that are representative of the emission unit's compliance with the applicable emission limitation or standard. Furthermore, the

federal operating permit must include compliance assurance monitoring (CAM) requirements for emission sources that meet the applicability criteria of 40 CFR Part 64 in accordance with 40 CFR § 70.6(a)(3)(i)(A) and 30 TAC § 122.604(b).

With the exception of any emission units listed in the Periodic Monitoring or CAM Summaries in the FOP, the TCEQ Executive Director has determined that the permit contains sufficient monitoring, testing, recordkeeping, and reporting requirements that assure compliance with the applicable requirements. If applicable, each emission unit that requires additional monitoring in the form of periodic monitoring or CAM is described in further detail under the Rationale for CAM/PM Methods Selected section following this paragraph.

Rationale for Compliance Assurance Monitoring (CAM)/ Periodic Monitoring Methods Selected

Periodic Monitoring:

The Federal Clean Air Act requires that each federal operating permit include monitoring sufficient to assure compliance with the terms and conditions of the permit. Most of the emission limits and standards applicable to emission units at Title V sources include adequate monitoring to show that the units meet the limits and standards. For those requirements that do not include monitoring, or where the monitoring is not sufficient to assure compliance, the federal operating permit must include such monitoring for the emission units affected. The following emission units are subject to periodic monitoring requirements because the emission units are subject to an emission limitation or standard for an air pollutant (or surrogate thereof) in an applicable requirement that does not already require monitoring, or the monitoring for the applicable requirement is not sufficient to assure compliance:

Unit/Group/Process Information	
ID No.: B-1	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 111, Visible Emissions	SOP Index No.: R1111-1
Pollutant: Opacity	Main Standard: § 111.111(a)(1)(B)
Monitoring Information	
Indicator: Fuel Type	
Minimum Frequency: Annually or at any time an alternate fuel is used	
Averaging Period: n/a	
Deviation Limit: If an alternate fuel is fired, either alone or in combination with the specified gas, for a period \geq to 24 consecutive hours, it shall be considered and reported as a deviation or the permit holder shall conduct visible emissions observation.	
Basis of monitoring: Industry has demonstrated through performance tests and historical data that opacity and particulate matter standards are consistently met when combustion units fire natural gas only. If the emission unit fires a different fuel for more than 24 hours, the permit holder may elect to perform opacity readings or visible emissions to demonstrate compliance is consistent with EPA Reference Test Method 9 and 22. Opacity and visible emissions have been used as an indicator of particulate emissions in many federal rules including 40 CFR Part 60, Subpart F and Subpart HH. In addition, use of these indicators is consistent with the EPA's "Compliance Assurance Monitoring (CAM) Technical Guidance Document" (August 1998). Monitoring specifications and procedures for the opacity are consistent with federal requirements and include the EPA's Test Method 9 for determining opacity by visual observations and the requirements of 40 CFR § 60.13 for a continuous opacity monitoring system (COMS). The monitoring specifications and procedures for the visible emissions monitoring are similar to "EPA Reference Method 22" procedures.	

Unit/Group/Process Information	
ID No.: GRP-TANKS2	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Storage of VOCs	SOP Index No.: R5112-1
Pollutant: VOC	Main Standard: § 115.112(e)(1)
Monitoring Information	
Indicator: Structural Integrity of the Pipe	
Minimum Frequency: Emptied and degassed	
Averaging Period: n/a	
Deviation Limit: Inspect to determine structural integrity of fill pipe each time the vessel is emptied and degassed. If structural integrity is in question, repair before vessel is refilled. It is a deviation if repairs are not completed prior to refilling vessel.	
<p>Basis of monitoring:</p> <p>The periodic monitoring option provided for emission units using a submerged fill pipe is location of the submerged fill pipe and structural integrity of the pipe. The location and the integrity of the pipe ensure that loading operations are controlled to prevent splash fill and reduce generated vapors; therefore, less emissions are released to the atmosphere. This approach was included as an option by the EPA in the "Periodic Monitoring Technical Reference Document" (April 1999) to monitor VOC sources.</p>	

Unit/Group/Process Information	
ID No.: GRP-TANKS2	
Control Device ID No.: N/A	Control Device Type: N/A
Applicable Regulatory Requirement	
Name: 30 TAC Chapter 115, Storage of VOCs	SOP Index No.: R5112-1
Pollutant: VOC	Main Standard: § 115.112(e)(1)
Monitoring Information	
Indicator: Record of Tank Construction Specifications	
Minimum Frequency: n/a	
Averaging Period: n/a	
Deviation Limit: Keep specs showing fill pipe from top of tank has a max clearance of 6" from bottom or, if loaded from the side, a discharge opening entirely submerged when pipe used to withdraw liquid from the tank can no longer withdraw liquid in normal operation.	
<p>Basis of monitoring:</p> <p>The periodic monitoring option provided for emission units using a submerged fill pipe is location of the submerged fill pipe and structural integrity of the pipe. The location and the integrity of the pipe ensure that loading operations are controlled to prevent splash fill and reduce generated vapors; therefore, less emissions are released to the atmosphere. This approach was included as an option by the EPA in the "Periodic Monitoring Technical Reference Document" (April 1999) to monitor VOC sources.</p>	

Compliance Review

1. In accordance with 30 TAC Chapter 60, the compliance history was reviewed on December 8, 2017.

Site rating: 1.52 / Satisfactory Company rating: 1.08 / Satisfactory

(High < 0.10; Satisfactory ≥ 0.10 and ≤ 55; Unsatisfactory > 55)

2. Has the permit changed on the basis of the compliance history or site/company rating?No

Site/Permit Area Compliance Status Review

1. Were there any out-of-compliance units listed on Form OP-ACPS?No

2. Is a compliance plan and schedule included in the permit?No

Available Unit Attribute Forms

OP-UA1 - Miscellaneous and Generic Unit Attributes

OP-UA2 - Stationary Reciprocating Internal Combustion Engine Attributes

OP-UA3 - Storage Tank/Vessel Attributes

OP-UA4 - Loading/Unloading Operations Attributes

OP-UA5 - Process Heater/Furnace Attributes

OP-UA6 - Boiler/Steam Generator/Steam Generating Unit Attributes

OP-UA7 - Flare Attributes

OP-UA8 - Coal Preparation Plant Attributes

OP-UA9 - Nonmetallic Mineral Process Plant Attributes

OP-UA10 - Gas Sweetening/Sulfur Recovery Unit Attributes

OP-UA11 - Stationary Turbine Attributes

OP-UA12 - Fugitive Emission Unit Attributes

OP-UA13 - Industrial Process Cooling Tower Attributes

OP-UA14 - Water Separator Attributes

OP-UA15 - Emission Point/Stationary Vent/Distillation Operation/Process Vent Attributes

OP-UA16 - Solvent Degreasing Machine Attributes

OP-UA17 - Distillation Unit Attributes

OP-UA18 - Surface Coating Operations Attributes

OP-UA19 - Wastewater Unit Attributes

OP-UA20 - Asphalt Operations Attributes

OP-UA21 - Grain Elevator Attributes

OP-UA22 - Printing Attributes

OP-UA24 - Wool Fiberglass Insulation Manufacturing Plant Attributes

OP-UA25 - Synthetic Fiber Production Attributes

OP-UA26 - Electroplating and Anodizing Unit Attributes

OP-UA27 - Nitric Acid Manufacturing Attributes

OP-UA28 - Polymer Manufacturing Attributes

OP-UA29 - Glass Manufacturing Unit Attributes

OP-UA30 - Kraft, Soda, Sulfite, and Stand-Alone Semi-chemical Pulp Mill Attributes

OP-UA31 - Lead Smelting Attributes

OP-UA32 - Copper and Zinc Smelting/Brass and Bronze Production Attributes

OP-UA33 - Metallic Mineral Processing Plant Attributes

OP-UA34 - Pharmaceutical Manufacturing

OP-UA35 - Incinerator Attributes

OP-UA36 - Steel Plant Unit Attributes

OP-UA37 - Basic Oxygen Process Furnace Unit Attributes

OP-UA38 - Lead-Acid Battery Manufacturing Plant Attributes

OP-UA39 - Sterilization Source Attributes

OP-UA40 - Ferroalloy Production Facility Attributes

OP-UA41 - Dry Cleaning Facility Attributes

OP-UA42 - Phosphate Fertilizer Manufacturing Attributes

OP-UA43 - Sulfuric Acid Production Attributes

OP-UA44 - Municipal Solid Waste Landfill/Waste Disposal Site Attributes

OP-UA45 - Surface Impoundment Attributes

OP-UA46 - Epoxy Resins and Non-Nylon Polyamides Production Attributes
OP-UA47 - Ship Building and Ship Repair Unit Attributes
OP-UA48 - Air Oxidation Unit Process Attributes
OP-UA49 - Vacuum-Producing System Attributes
OP-UA50 - Fluid Catalytic Cracking Unit Catalyst Regenerator/Fuel Gas Combustion Device/Claus Sulfur Recovery Plant Attributes
OP-UA51 - Dryer/Kiln/Oven Attributes
OP-UA52 - Closed Vent Systems and Control Devices
OP-UA53 - Beryllium Processing Attributes
OP-UA54 - Mercury Chlor-Alkali Cell Attributes
OP-UA55 - Transfer System Attributes
OP-UA56 - Vinyl Chloride Process Attributes
OP-UA57 - Cleaning/De-painting Operation Attributes
OP-UA58 - Treatment Process Attributes
OP-UA59 - Coke By-Product Recovery Plant Attributes
OP-UA60 - Chemical Manufacturing Process Unit Attributes
OP-UA61 - Pulp, Paper, or Paperboard Producing Process Attributes
OP-UA62 - Glycol Dehydration Unit Attributes
OP-UA63 - Vegetable Oil Production Attributes